



US009410343B2

(12) **United States Patent**
Hotes

(10) **Patent No.:** **US 9,410,343 B2**
(45) **Date of Patent:** **Aug. 9, 2016**

(54) **COLLAPSIBLE FRAME FOR A PORTABLE SHELTER**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **14/553,737**

(22) Filed: **Nov. 25, 2014**

(65) **Prior Publication Data**

US 2015/0083177 A1 Mar. 26, 2015

Related U.S. Application Data

(63) Continuation-in-part of application No. 13/790,842, filed on Mar. 8, 2013, now Pat. No. 9,097,034.

(60) Provisional application No. 61/651,365, filed on May 24, 2012.

(51) **Int. Cl.**

E04H 15/48 (2006.01)

E04H 15/32 (2006.01)

E04H 9/14 (2006.01)

(52) **U.S. Cl.**

CPC **E04H 15/48** (2013.01); **E04H 15/32** (2013.01); **E04H 9/14** (2013.01); **Y10T 29/49716** (2015.01)

(58) **Field of Classification Search**

CPC E04H 15/48; E04H 15/34; E04H 15/44; E04H 15/36; E04C 3/005; E04C 3/02; E04B 1/344; E04B 1/34357; Y10T 29/49716

USPC 135/121-124, 120.1, 120.3, 132, 138, 135/144, 147, 151-154; 403/85, 93, 97-98, 403/101, 170; 52/645-646, 656.9, 83

See application file for complete search history.

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(57) **ABSTRACT**

In a portable shelter frame, a frame support is selectively articulable between an erected state and a collapsed state. The frame support includes a central frame member; a pair of upper arcuate frame members rotatably coupled to the ends of the central frame member, each pair of frame upper frame members being selectively moveable between a first, fixed position when the frame support is in the erected state and a second, fixed position when the frame support is in the collapsed state; and a pair of lower arcuate frame members rotatably coupled to the other ends of the upper arcuate frame members, each pair of frame lower frame members being selectively moveable between a first, fixed position when the frame support is in the erected state and a second, fixed position when the frame support is in the collapsed state. A frame assembly may include two more of the frame supports, purlin assemblies interconnecting the frame supports, respectively, each purlin assembly including first and second purlin members rotatably coupled about a purlin mid-joint, a first end of the purlin assembly being pivotally coupled to one of the frame supports, and a second end of the purlin assembly being pivotally coupled to another frame support, the purlin assembly being selectively lockable in an extended position when the frame is in the erected state, the purlin members being rotatable to a folded position when the frame is in the collapsed state.

19 Claims, 23 Drawing Sheets

